

$$\sum_{n=1}^{\infty} \left( \frac{1}{n} \right)^{\alpha} \left( \frac{1}{n} \right)^{\beta} \left( \frac{1}{n} \right)^{\gamma} = \frac{1}{\Gamma(\alpha+1)} \frac{1}{\Gamma(\beta+1)} \frac{1}{\Gamma(\gamma+1)} \frac{1}{\Gamma(\alpha+\beta+\gamma+3)} \frac{1}{\Gamma(\alpha+\beta+\gamma+2)} \frac{1}{\Gamma(\alpha+\beta+\gamma+1)} \frac{1}{\Gamma(\alpha+\beta+\gamma+0)}.$$

- If the entry in column 1 is less than the entry in column 2, write “**L**” in column 3.
- If the entry in column 1 is greater than or equal to the entry in column 2, write “**H**” in column 3.